

MOUNTAIN AGRICULTURE

Conducted by Mr. Robert F. Spence, Farm Demonstrator and Special Investigator

LET US KEEP ON SERVING

Don't let us make the mistake of disorganizing the county war boards. It is unfortunate that the district draft boards have been disbanded, although they certainly have earned a rest. However, State Councils of Defense are crumbling and the county war committees must rally to the call of the nation as never before.

America has certainly a large and disagreeable task to perform. Now that the excitement of war has died away we must realize that America must justify itself in all its democratic claims. We must just as cheerfully do the drudgery and pay the bills without stress of urging as we would were the Huns clamoring at our gates.

It is so natural and easy to duck our responsibilities. The only way we can redeem our promise to pay is to organize each community the same as for war, and make it impossible through the force of public opinion for any man to escape doing his full share.

It seems scarcely necessary for us to express our gratitude to our heroes who have given their lives and to those who are coming back mutilated and sick. They have made the supreme sacrifice; have given up their business, their pleasures, their homes, and their very lives for us.

There are many bills which we must pay which cannot be done by taxation. The government has spent all of the money raised in its four liberty loans and still we are spending billions.

A DAIRY RECORD

Dollie's Valentine, 105049, was a registered Jersey cow that was purchased by the Kentucky Experiment Station in 1896. She looked to the authorities there like a real producer and a useful sort of cow. She was milked carefully and fed well, and produced in one year 10,218 pounds of milk and 676 pounds of butter. She was a prolific cow that had a calf every year, giving birth to thirteen calves before she died in 1910. Like a great many motherly cows she passed the regular breeding habit on to her offsprings. One daughter had ten calves, another daughter eleven and a third daughter had an even dozen calves. As a consequence of this prolific nature her descendants today dominate in the Station herd. Daughters, granddaughters, and great granddaughters of the old cow are in the herd. Best of all she handed on the ability to produce great quantities of milk and butter, because her daughters and granddaughters are all making register of merit records that vary from seven to eight thousand pounds of milk and from four to six hundred pounds of butter in a year.

Dollie is a fine example of a good cow that founded a very useful family. It pays to start with good foundation stock in any breed and then to keep the best, and only the best, offsprings from that foundation stock. The herd at the Station has rapidly increased in production as the best offsprings of Dollie are mated with fine bulls year after year. This is an excellent illustration of constructive breeding, a subject that will be fully discussed at Farmers' Week at the University of Kentucky, January 28 to 31, and this useful family of cows will be exhibited and the methods of breeding, feeding and caring for them will be fully explained.

RHODE ISLAND RED

County Agent Spence, Berea, Ky., would like to have a letter from each of the Rhode Island Red breeders of Madison and Rockcastle counties. In this letter he would like for each breeder to state the number of Reds and whether or not they will have eggs for sale.

There is going to be a great demand for pure bred Rhode Island Red eggs this year. Where eggs are purchased for hatching purposes the flock should be graded. County Agent Spence will have a specialist to come and grade the flocks if he is notified of each flock where eggs are to be sold or even kept at home for hatching purposes.

We hope that each Rhode Island Red breeder will write to County Agent Spence at once so he can inform the public just how many eggs we can expect to have for sale.

County Agent Spence's idea is to get all "Red" breeders to meet in Berea soon for the purpose of discussing the plan of marketing the "Red" eggs, and getting the closer co-operation of the breeders. Calls are coming to County Agent's office now for eggs. Let's all write our County Agent right away.

KEEPING THE HENS BUSY

Exercise is one of the most important requisites to winter eggs. If the hens are not forced to exercise they will seldom indulge. In this respect, they are of the same trait as the members of the human family.

But if you can get the hens to working, circulation will be started, appetites will be improved, they will eat more, they will get their organs to functioning and that will eventually result in eggs, if they have a balanced egg ration.

The facilities at hand have everything to do with this. Good clean litter is necessary. If the hens have to work in damp, musty litter they cannot be blamed for standing around with their backs hunched up on cold days.

One of the most successful ways to both feed and exercise hens, a plan that is economical for the farmer to follow, is to throw in a few forkfuls of oats just at it was stacked. It is a good plan to save some at threshing time for this purpose. The hens will harvest their own grain and the way they tear up the straw bears eloquent testimony to the fact that they are getting exercise.

Out straw is the best kind of litter for the poultry and it is the cheapest. When kept dry and clean, it will be the best means of exercising the winter layers. All grain should be fed in it in order to induce exercise.

Another plan to keep the hens busy, is to suspend a small head of cabbage on a cord so that it is about level with the hens' heads. In picking at it, the cabbage will swing back and forth and the hens will get some exercise in eating it. Some people hang it higher so that the hens will have to jump, but I have never been able to see any particular advantage in that plan. There is such a thing as giving the hens the wrong kind of exercise. Turnips, or other roots attached to stalks along the walls of the poultry house can be used to carry out the same purpose.

Another means of exercising that is very good is the use of patented poultry feeders. These appliances contain the grain mixture and are so arranged that the hens feed themselves by picking at a handful of grain exposed in a wire cup. Every time the cup is picked at it releases some grain which falls into the litter. Thus the hens are kept busy getting their grain and then in scratching it out of the litter.

Where dirt scratching sheds can be attached to the poultry house for use of the flock in winter, they will do much to keep the hens contented and busy. The dirt in these sheds should be loose and easily worked. Sand or ashes may be mixed with the soil to make this possible. If kept in this manner it can be used all winter without freezing up like loam or clay soils.

SELECT HENS FOR BREEDERS

Choose Individuals That Are Layers and Meet Standard Requirements as Far as Possible.

In selecting for egg production include in the breeding pen hens that laid in November, December and January. Choose individuals having constitutional vigor and meeting standard requirements so far as possible.

CINCINNATI MARKETS.

Hay and Grain.
Corn—No. 2 white \$1.35@1.38, No. 3 white \$1.34@1.37, No. 2 yellow \$1.39@1.41, No. 3 yellow \$1.37@1.39, No. 2 mixed \$1.34@1.38, No. 3 mixed \$1.31@1.34, white ear \$1.32@1.35, yellow ear \$1.31@1.34, mixed ear \$1.30@1.32.
Soybean—Timothy, per ton, raised from \$27.00. Sound clover mixed \$27.00, and sound clover \$24.50@25.00.

Oats—No. 2 white 70¢@77¢, standard white 74¢@76¢, No. 3 white 75¢@76¢, mixed 74¢@75¢, No. 3 mixed 73¢@74¢.

Butter, Eggs and Poultry.
Butter—Whole milk creamery extra 71¢, centralized creamery extra 68¢, basic 64¢.

Eggs—Prime firsts 55¢, firsts 54¢, ordinary firsts 50¢.

Live Poultry—Springers under 4 lbs. 30¢; fowls, 5 lbs and over, 30¢; do 3½ lbs and over, 28¢; roosters, 25¢.

Live Stock.
Cattle—Shippers \$13@16.75, butcher steers, extra \$13.50@15, good to choice \$11.50@13.50, common to fair \$7@11, heifers, extra \$11.50@13.50, good to choice \$10@11.50, common to fair \$7@9.50, cows, extra \$9.50@10.50.

Calves—Extra \$17.50@18, fair to good \$15@17.50, common and large \$6@14.
Hogs—Selected heavy shippers \$17.50, good choice packers and butchers \$17.50, stags \$10@12, common to choice heavy fat sows \$12@16, light shippers \$16.50@17.50, pigs (110 lbs and over) \$12@16.

SIX DOORS

FOR ASPIRING YOUNG PEOPLE

1st Door—Berea's Vocational Schools

Training that adds to your money-earning power, combined with general education.

FOR YOUNG MEN—Agriculture, Carpentry, Bricklaying, Printing, Commerce and Telegraphy.

FOR YOUNG LADIES—Home Science, Dressmaking, Cooking, Nursing, Stenography and Typewriting.

2nd Door—Berea's Foundation School

General Education for those not far advanced, combined with some vocational training. No matter what your present advancement, we can put you with others like yourself and give chance for most rapid improvement.

3rd Door—Berea's English Academy Course

For those who are not expecting to teach and who are not going thru College and desire more general education. It also gives the best general education for those who wish a good start in study and expect to carry it on by themselves.

4th Door—Berea's Normal School

This gives the best training for those who expect to teach. Courses are so arranged that young people can teach through the summer and fall and attend school through the winter and spring, thus earning money to keep right on in their courses of study. Read Dinsmore's great book, "How to Teach a District School."

5th Door—Berea's Preparatory Academy Course

This is the straight road to College—best training in Mathematics, Science, Languages, History and all preparatory subjects. The Academy is now Berea's largest department.

6th Door—Berea College

This is the crown of the whole Institution, and provides standard courses in all advanced subjects.

A Temporary Raise in Board is forced by war conditions. For twenty-five years the board has remained the same in Berea, but the unusual situation in which the whole country finds itself now makes it impossible for us to live on the same money as we have in the past. This adds \$15.50 to the former expenses of the girls and \$24.60 to the expenses of the boys, for the year, but still leaves the cost half that at other schools and "cheaper than staying at home."

PAYMENT MUST BE IN ADVANCE, incidental fee and room rent by the term, board by the half term. Installments are as follows:

WINTER TERM			
Expenses for Boys			
	VOCATIONAL AND FOUNDATION SCHOOLS	ACADEMY AND NORMAL	COLLEGE
Incidental Fee	\$ 5.00	\$ 6.00	\$ 7.00
Room	7.00	7.00	7.00
Board, 6 weeks	13.50	13.50	13.50
Amount due Jan. 1, 1919	25.50	26.50	27.50
Board, 6 weeks, due Feb. 5	13.50	13.50	13.50
Total for Term	39.00	40.00	41.00
Expenses for Girls			
Incidental Fee	\$ 5.00	\$ 6.00	\$ 7.00
Room	7.00	7.00	7.00
Board, 6 weeks	12.00	12.00	12.00
Amount due Jan. 1, 1919	24.00	25.00	26.00
Board, 6 weeks, due Feb. 5	12.00	12.00	12.00
Total for Term	36.00	37.00	38.00

* This does not include the dollar deposit nor money for books or laundry.

Special Expenses in Addition to Incidental Fee—Business

	Fall	Winter	Spring
Stenography and Typewriting	\$14.00	\$12.00	\$10.00
Bookkeeping (brief course)	14.00	12.00	10.00
Bookkeeping (regular course)	7.00	6.00	5.00
Business course for students in other departments:			
Stenography	10.50	9.00	7.50
Typewriting, with one hour's use of instrument	7.00	6.00	5.00
Com. Law, Com. Geog. Com. Arith., or Penmanship, each	2.10	1.80	1.50

In no case will special Business Fees exceed \$15.00 per term.

All students do some work with their hands from six to sixteen hours a week as janitors or in the farm, carpenter shop, printing office, laundry, boarding hall, office, etc., and receive pay which reduces their expenses.

Any able-bodied young man or young woman can get an education at Berea if there is the will to do so.

If it is impossible for any young man or young woman to be in school the full year, by all means they should enter for a course during the winter and spring terms.

The public schools will close about Christmas and the teachers and advanced pupils should not be idle through the long winter months but should be studying in Berea where the best education can be gotten for least money.

Applicants must bring or send a testimonial showing that they are above 15 years old, in good health and of good character. This may be signed by some former Berea student in good standing or some reliable teacher or neighbor. The use of tobacco is strictly forbidden.

For information or friendly advice write to the Secretary.

MARSHALL E. VAUGHN, Berea, Ky.

BOYS' RESERVE ENROLLMENT WEEK

Uncle Sam's boys between the ages of 16 and 21 all over the Nation are to be summoned to world-wide relief work during the week of January 20 to 26. Volunteers are needed on the farms to help plant, tend and harvest the greatest food crop ever produced in the United States. President Wilson has called for enormous supplies for the hungry people of Europe upon the report of Herbert Hoover and his staff of investigators.

Military and civic authorities in Kentucky declare there will be a shortage of farm labor this year. This shortage can be met in a very large way by the boys and the U. S.

Department of Labor has chosen the Reserve for the work. Last year several thousand boys in Kentucky were enlisted through the Reserve and gave splendid service.

All boys between the ages of 16 and 21 are entitled to be enrolled. By working thirty-six days they will receive a bronze badge and be entitled to wear the official uniform; by working seventy-five days or more they will receive a service bar. Boys who work on the farms of their parents or neighbors are entitled to enroll as well as boys in the cities and towns and receive the rewards of faithful service.

Federal county directors in the State are in charge of the enrollment week.

HOME DEPARTMENT

Conducted by Miss Margaret Disney, Director of Home Science

FOOD FOR INFLUENZA PATIENTS

The advice of the doctor should always be asked and followed regarding the patients' food but as his advice is often general perhaps the following hints may be helpful in carrying out his directions.

During the period when liquid diet is needed, fresh buttermilk is one of the best things possible for those who like it. Meat broths, soups, and soft custards are good. During this time the patient may have orange juice and lemonade but not solid fruits like raw apples, etc.

To get the most nourishment from the broth the fresh meats, chicken or beef, should be cut in small pieces, the bones cracked and all covered with cold water to which a small amount of salt has been added. This should be heated slowly and cooked at a low temperature for several hours. A little onion or celery salt may be added to this if a variety of seasoning is desired. Pour off the broth and if very fat, cool, remove the fat and reheat the broth before serving.

Soft Custard

Beat two eggs enough to blend the yolk and white; add four tablespoons of sugar, a speck of salt, two cups of milk, and flavor with nutmeg. Cook in a double boiler, stirring constantly, until the custard coats the spoon. If the custard is cooked too long, it will curdle. It must be removed from the fire as soon as it begins to thicken and poured into a cool dish. Serve cold.

Potato Soup

Potato soup is relished by some patients and may be used if the doctor permits. As it contains so large a proportion of milk it is also quite nourishing.

Cook three potatoes in boiling salted water; when soft rub through a sieve, and use about two and a half cups of potato. Scald one quart of milk with two slices of onion. Add the potato. Remove onion. Melt two tablespoons butter and add two tablespoons flour, and mix thoroughly. Add a speck of pepper. Stir into the soup. Boil three minutes, sprinkle with one tablespoon chopped parsley, and serve.

Those patients who have been obliged to abstain from food for some time on account of nausea will do well to begin with very small quantities taken frequently. Some times a little crisp toast chewed thoroughly and swallowed by itself will be well retained. Sometimes a little very cold sweet orange juice will serve to start digestion. Sometimes grape juice lemonade made by adding grape juice to a not too sweet lemonade served very cold and taken a few tablespoonfuls at a time will set when neither the lemonade nor the grape juice by

itself is welcome.

As the patient's temperature becomes normal they should have plenty of nourishing food to repair the waste of the disease. Broiled steak, stewed chicken and beef served with the broth, soft cooked eggs, etc. Vegetables and fruits are valuable for their laxative effects and to stimulate the appetite.

Patients left with a bad taste in their mouths will appreciate acid fruits, apples baked or made into sauce, stewed peaches, apricots, etc.

Eggs cooked at low temperature are much more easily digested than those cooked in higher heat. Fried eggs are hard to digest and should be avoided.

Boiled Eggs

Pour boiling water into a stewpan and place it over the fire and make sure that it is actually boiling. Put eggs into the water, and let them remain over the fire for a few seconds. Cover the stewpan and place it where the water will not lose too much heat, but where it will not boil, for six to eight minutes for "soft-boiled eggs," or 20 to 30 minutes for "hard-boiled." Or eggs may be placed in cold water and brought to the boiling point. When the water boils, the eggs are "soft-boiled." They may be boiled for five minutes longer for a "hard-boiled" egg.

Scrambled Eggs

Beat six eggs slightly, until whites and yolks are blended; add one-half cup of milk or water, and one-fourth teaspoon of salt. Put two tablespoons of butter into the omelet pan, and heat until the butter is melted. Turn in the egg mixture, and cook at a low temperature until creamy, scraping the cooked portions from the side of the pan so the uncooked part will reach the bottom. Remove from the pan and serve immediately.

Poached Eggs

Have a frying pan half full of boiling water, add one-half teaspoon of salt. Break the eggs, one at a time, into a cup, and carefully slip them into the water. Let them remain in the water until cooked as desired. Lift them out carefully with a skimmer, and serve on buttered toast.

TO BROIL STEAK

Select tender meat, pound it, and make little cuts along the edges. Heat the frying pan smoking hot, wipe over with suet, put in the steak, sear quickly on one side, then on the other, and turn often enough to prevent burning until it is done. Remove to a hot plate and season with salt and butter. If the pan is hot enough this method of cooking keeps all the juices in the meat.

Rare done steak is tenderer and more easily digested than well done but it is quite possible to cook good beef thoroughly in this way and still have it tender and juicy. The meat must be removed from the fire as soon as done.

Jessie S. Moore

WHEATLESS RATIONS TO FATTEN POULTRY

Efficient Combinations for Making Rapid Gains.

Commercial Feeders Will Find Tests Made by Specialists of Agricultural Department Economical for Producing Flesh.

(Prepared by the United States Department of Agriculture.)

Wheatless rations for commercial or coop fleshing of young chickens for market offers to commercial feeders singularly efficient and economical rations for rapid gains in weight. In tests conducted by specialists of the United States department of agriculture a ration composed of cornmeal and fresh buttermilk, fed again and again throughout the whole feeding season, produced in 14 days' coop feeding an average gain of a pound for every 8.88 pounds of wet feed consumed. Still better results were obtained with distillers' grains. In the tests the highest and cheapest gains were made by birds having an initial weight of two pounds or less.

The tests were made under commercial rather than farm methods of poultry feeding. The aim of the commercial feeder is to increase the flesh of young birds rapidly and economically in a brief period after they are received from the farms, and this necessitates the use of coops, which allow the chickens little exercise and regular and abundant feeding under clean conditions. It calls for special equipment and for use of time and employment of labor to a degree not possible on most farms.

Three rations were used in the ex-

periments. Ration A, consisting of 100 pounds of cornmeal and 127 pounds of water, after a two weeks' feeding period, gave a gain of 5 per cent of the initial weight. Ration B, consisting of 100 pounds of cornmeal and 150 pounds of fresh buttermilk, after a feeding period of the same length, gave a gain of 39.41 per cent of the initial weight. Ration C, consisting of 75 pounds of cornmeal, 25 pounds dried distillers' grain (corn) and 150 pounds fresh buttermilk, gave during this feeding period a gain of 35.1 per cent of the initial weight. The amount of wet feed required to produce a gain of one pound of flesh in 14 days was as follows:

Ration A 43.91 pounds (Grain 19.54 pounds)
Ration B 5.88 pounds (Grain 2.35 pounds)
Ration C 7.91 pounds (Grain 3.16 pounds)

With ration C the gain was practically uniform, while the rate of gain with ration B decreased slightly toward the end of the feeding period, and the gain made by the chickens fed on ration A was irregular.

It was found that if every 20,000-pound carload of broilers slaughtered as they come from the farm are fed for two weeks on ration C the gain in weight to the packer would average 6,867 pounds. The gain in edible meat would amount to 4,964 pounds, of which approximately 608 pounds are protein and 1,561 are fat.

Ration C, which gave the best results, was for the production of poultry flesh food only, and the same results would not be obtained if fed to birds when unconfined; hence the deductions drawn on the basis of the experiment reported must not be applied to birds intended for egg production or for breeding stock, or to the feeding of birds ranging on the farm.

Uses for Sweet Potatoes. Sweet potatoes are not only valuable as human food, but may also be used for stock.